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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,080

01/24/2007

Gerhard Schwenk

SCHW3005/JJC

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BACON & THOMAS, PLLC

625 SLATERS LANE

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EXAMINER

JOY, DAVID J

ART UNIT

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1785

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,080	<b>Applicant(s)</b> SCHWENK ET AL.	
	<b>Examiner</b> David J. Joy	<b>Art Unit</b> 1785	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 23-40, 44 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 41-43 is/are rejected.
- 7) ☒ Claim(s) 1, 11 and 22 is/are objected to.
- 8) ☒ Claim(s) 1-45 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/26/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
2. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted:
  - I. Group I, Claims 1-22 and 41-43, drawn to a value document;
  - II. Group II, Claims 23-26 and 44, drawn to a method for producing a value document; and
  - III. Group III, Claims 27-40 and 45, drawn to a method for checking or processing a value document.
3. The groups of inventions listed above, as Groups I-III, do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: As evidenced by the teachings of the prior art (specifically, the U.S. Patent of Bratchley et

al., US 6,155,605 --- cited by Applicant), it is established that the special technical feature of the instant Claim 1, a value document comprising a value document substrate and different feature substances for checking the value document, including a first feature substance incorporated into the volume of the substrate of the value document, and second and third feature substrates provided on the value document substrate in a printing ink jointly and in the form of coding, the second feature being luminescent and the third feature absorbing in a special spectral range, is known (see Abstract; see also Column 1, Lines 10-48; see also Column 2, Lines 1-11; see also Column 3, Line 48 – Column 4, Line 18; see also Column 4, Lines 24-34; see also Column 4, Line 56 – Column 5, Line 11). Therefore, there is lack of unity *a posteriori*, since the special technical feature of Claim 1 is not a technical feature that defines a contribution over the prior art.

4. During a telephone conversation with J. Ernest Kenney on March 5, 2010 a provisional election was made without traverse to prosecute the invention of Group I, Claims 1-22 and 41-43. Affirmation of this election must be made by Applicant in replying to this Office action. Claims 23-40, 44 and 45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

7. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product

claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

#### *Priority*

8. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### *Claim Objections*

9. Claims 1, 11 and 22 are objected to because of the following informalities:
  - a. Line 5 of Claim 1 recites “third feature substances provided on *to* the value document substrate in” (emphasis added);
  - b. Line 3 of Claim 11 recites “substance if formed by a luminescent *sub-stance* or a mixture of luminescent (emphasis added); and

- c. Line 4 of Claim 22 recites "feature substance comprising *a* printing in the form of a printed image" (emphasis added).

These are grammatical errors. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 2, 4-6, 13, 20 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. The term "substantially" in Claims 2, 4 and 41, the term "significantly" in Claim 5, the term "significant" in Claim 6, the term "predominant" in Claim 13, and the term "partly" in Claim 20, are all relative terms which render the claims indefinite. The terms "substantially", "significantly", "significant", "predominant" and "partly" are not defined by the claims in which they appear, the specification does not provide a standard for ascertaining the requisite degree of any of the terms, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

13. Claims 22, 22, and 41 are rejected accordingly (in addition to the rejection of Claim 41 delineated *supra*), as they depend upon Claims 13 and 20.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claims 1-22, 41 and 43 rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent of Ahlers et al. (6,530,527; hereinafter "Ahlers") in view of the U.S. Patent of Bratchley et al. (6,155,605; hereinafter "Bratchley").



17. Ahlers teaches a value document ("value or security product") comprising a value document substrate and three different feature substances ("security elements") for checking the value document (see Abstract; see also Figures 2, 3 and 8-11).

Specifically, Ahlers teaches that the value document has a first feature substance incorporated into the volume of the substrate, and second and third feature substances provided jointly in a printing ink on the value document substrate (see Figures 2, 8 and 9; see also Column 1, Lines 10-16; see also Column 6, Lines 53-57; see also Column 7, Lines 7-13). Ahlers also teaches the second feature substance comprising a luminescent substance ("luminous dyes") and the third feature substance comprising a material absorbent in a special spectral range (see Figures 8-11; see also Column 7, Lines 4-21).

Additionally, Ahlers provides that there can be additional feature substances, in addition to the three feature substances shown in the figures, which means that a fourth feature substance could be included in the value document, and that a fourth feature substance can be formed of the same luminescent materials as the other feature substances (see Column 7, Lines 4-21). Further, Ahlers shows that the first feature substance can be distributed uniformly within the value document substrate (see Figures 2-5; see also Column 6, Lines 35-65; see also Column 8, Lines 40-46).

18. Ahlers teaches that the third feature substance comprises a material that absorbs within the infrared range, and that the third feature substance is substantially colorless or has weak color in the visible range (see Abstract; see also Column 1, Lines 10-16).

Ahlers teaches absorption in the infrared range. As per the instant specification, the "infrared spectral range" is understood to be the wavelength range from 750 nm or more. Therefore, the infrared range taught by Ahlers includes the spectral ranges of above 1.2  $\mu\text{m}$  (i.e., 1200 nm) and from about 1.5  $\mu\text{m}$  to 2.2  $\mu\text{m}$  (i.e., 1500 to 2200 nm)

(*Id.*). Also, Ahlers teaches that the third feature substance comprises a doped semiconductor material, metal oxide, or rare earth metals (see Column 3, Lines 21-27.)

In addition, Ahlers provides that the third feature substance is present in particle form with a particle size that is smaller than 50 nm (see Column 4, Lines 43-52). Ahlers also teaches that the value document substrate can be paper of cotton fibers or a plastic film (see Column 1, Lines 18-27; see also Column 6, Lines 35-44). Ahlers also provides that the value document comprises an additional print layer covering the value document, and that the print layer comprises a fourth feature substance and that the layer contains a translucent print dye (see Figures 10 and 11, see also Column 7, Lines 13-21).

19. Ahlers teaches a value document comprising the features and details as discussed hereinabove. However, Ahlers fails to teach or suggest that the second and

third feature substances are in the form of coding. Bratchley, which is drawn to a document of value, teaches that feature substances in the form of coding can be incorporated in the document of value, and that the coding can be bar codes, information about the value document, or an alphanumeric character string (i.e., an account code) (see Column 1, Lines 49-63; see also Column 2, Lines 5-18). In addition, Bratchley provides that the bar codes can extend over the total surface of the value document (“two-dimensional checkerboard format”) (*Id.*). The use of bar codes is known in order to provide additional security to a document and as a way to add important information to a value document. Therefore, as both Ahlers and Bratchley are drawn to the same field of invention, it would have been obvious to a person having ordinary skill in the art at the time of invention, to have made the value document having the feature substances taught by Ahlers and to incorporate the additional coding information taught by Bratchley, thereby arriving at the present invention.

20. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlers in view of Bratchley, as applied to Claims 1 and 13 above, and further in view of the U.S. Patent Application Publication of Henderson et al. (2002/0188845; hereinafter “Henderson”).

21. Ahlers, in view of Bratchley, teaches a value document comprising the feature substances and information in the form coding or bar codes, as discussed hereinabove. However, neither Ahlers nor Bratchley teaches or suggests that the coded information can be in an encrypted form. Henderson, which is drawn to value-bearing documents, teaches that a value-bearing document that includes information in encrypted form (see ¶ [0046]). In Bratchley, bar codes are used in order to provide additional security to a document and as a way to add important information to a value document, and as per Henderson encrypting that information provides further security to the information on the value-bearing document. As Ahlers, Bratchley and Henderson are all drawn to the same field of invention, it would have been obvious to a person having ordinary skill in the art at the time of invention to have incorporated the bar coding taught by Bratchley and to encrypt the information contained therein as is taught by Henderson when making the value document having the feature substances taught by Ahlers, thereby arriving at the present invention.

### *Double Patenting*

22. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent

and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

23. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

24. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

25. Claims 1-23, 27-29, 31-40, 42, 43 and 45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-10, 12-29 and 31-43 of copending Application No. 10/574,838. Although the conflicting claims are not identical, they are not patentably distinct from each other because both pending applications claim a value document comprising a value document substrate and different feature substances, a method for producing a value document comprising a value document substrate and different feature substances, and a method for checking or processing a value document comprising a value document substrate and different feature substances. Specifically, the copending application claims a value document comprising a value document substrate and at least three different feature substances for checking the value document, wherein the value document has a first feature substance incorporated into the volume of the substrate of the value document, and second and third feature substances provided on the value document substrate in a printing ink jointly and in the form of coding, the second feature substance comprising a luminescent substance and the third feature substance comprising a material absorbent in a selected spectral range (e.g., the infrared spectral range).

26. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

*Conclusion*

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,234,537	05/2001	Gutmann et al.
US 6,786,954	09/2004	Lee et al.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Joy whose telephone number is (571) 272-9056. The examiner can normally be reached on Monday - Friday, 7:00 AM - 3:30 PM EST.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/

Supervisory Patent Examiner, Art Unit 1785

/DJJ/

Examiner, Art Unit 1785